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10/809,899	03/26/2004	Anil K. Agarwal	A8738	7690
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SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				MOUTAOUKIL, MOUNIR
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/809,899	AGARWAL ET AL.
<b>Examiner</b>	<b>Art Unit</b>	
Mounir Moutaouakil	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 03/26/2004.

2a)  This action is **FINAL**:                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-18,23-25 and 27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-18,23-25 and 27 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 26 March 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 18 and 25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 5 of U.S. Patent No. 6,819,658. Although the conflicting claims are not identical, they are not patentably distinct from each other because they teach a method of transmitting information arranged in packets from one location to a second location via wireless/satellite network.

Claim 18 includes all the limitations of claim 1 of U.S. Patent No. 6,819,658 except for the deletion of the limitation "(e) sorting said SAR segments by at least one of carrier id, burst position in frame and channel in burst; (f) sending said SAR segments

to a predetermined modem; (g) determining whether a source and destination ID for segments and bursts are identical; and (h) on the basis of the identity of a unit, site and control group, generating burst and identity information for transmission to said second site". The deleted limitation was omitted to broaden the scope of the claim. Therefore, deletion of the additional limitations in the instant claim would have been obvious to one of ordinary skill in the art.

Claim 25 includes all the limitations of claim 5 of U.S. Patent No. 6,819,658 except for the deletion of the limitation "wherein said resequencing step comprises computing a burst slot and composing a key for arranging said segments into a queue". The deleted limitation was omitted to broaden the scope of the claim. Therefore, deletion of the additional limitations in the instant claim would have been obvious to one of ordinary skill in the art.

See *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Birdwell et al (US 6,172,972). Hereinafter referred to as Birdwell.

Regarding claim 18, Birdwell discloses the method of transmitting information arranged in packets from one location to a second location via a wireless/satellite network. The method comprises: a) examining each packet to determine whether its size is equal to a minimum (column 5, lines 30-35. the system determines the size of the MPT frame. The MPT frame may be consisted of one or more fixed sized packets. Therefore the size is equal minimum); (b) if a minimum size, generating a first SAR header and applying said header to said packet to form a SAR segment (column 5, lines 36-58 and column 6, lines 54-60. where the first SAR header has the SOF and EOF set to 1 such as to designate that the packet is of minimum size); (c) if greater than a minimum size, dividing said packet into a plurality of segments having a uniform size, generating a second SAR header that is unique for each segment and applying said header to a respective one of said segments to form SAR segments (column 5, line30- column 6, line 67. where the second SAR header has and SOF or an EOF equal to 0) (d) forwarding said SAR segments to one or more modems for transmission to at least one terminal at said second location (column 6, lines 62-67. the satellite MUX embeds the MPT packets into fixed-length packets for transmission).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-8, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akyildiz, IF. Et al ("satellite ATM Networks: A Survey" IEEE Communication Magazine, IEEE Service Center. Piscataway, N.J., US, vol. 35, no. 7, 1 July 1997 pages 30-43, XP000695129 ISSN: 0163-6804) in view of Birdwell, in further in view of Perdikaris et al (US 5,163,047). Hereinafter referred to as Akyildiz and Perdikaris.

Regarding claim 1. Akyildiz discloses a communication system for efficiently transmitting information signals that were formatted in variable sized packets of more than a minimum size (see page 35, right column, lines 4-30. SAR indicates the ability to segment variable size packets) by using time division transmission (see page 34, left column, line 1. TDMA is employed to transmit packets) of packet segments and allocating available bandwidth on demand (page 34, right column, lines 17-20). The system comprises: a satellite/wireless network (see fig.1); at least two sites (see fig.1, fig.8, and fig.13), each comprising a plurality of terminals operative to transmit and receive signals via said satellite/wireless network and a local area network for interconnecting the terminals at a common site (see fig.13, page 30, left column, line 1-right column, line 9. multiple user may be added the system). Each one of the terminals comprises: (a) a modem for transmitting signals from a terminal on predetermined channels having a predetermined bandwidth (see fig.3. it is inherent that each one of the subscriber would have a modem to be enabled a communication with the network. Page 38, left column, line 50- right column, line 26. The satellite bandwidth

management controls which of the terminals should be allocated bandwidth capacity according to traffic capacity); (b) means for time dividing data signals input to said terminal from an external location and for assembling said time divided data signals as bursts within repeated frames, each frame having a unique frame header (see page 31, right column, lines 6-30 where cells are extracted from frames, which indicate that cells are formatted into frames); (c) means for dividing information signals arranged in variable sized packets into a plurality of segments (see page 35, right column, lines 4-30. The satellite link uses SAR. Thus, it would have been obvious that the terminal would use SAR in order to solve the burst error problem for the link) (d) means for combining each segment in said plurality of segments with a unique segment and reassembly header to form a SAR segment (see page 35, right column, lines 4-30. the satellite link uses SAR. Thus, it would have been obvious that the terminal would use SAR in order to solve the burst error problem for the link).

Akyildiz does not possibly disclose or suggest (e) means for combining said SAR segments representing a single packet with a unique frame header to form a SAR frame; and (f) means for selectively appending a terminal ID header to each said SAR frame for transmission in a burst from a modem. However, Birdwell teaches, in a satellite network, having means for inserting SAR segments (fixed length MPT packets) representing a single packet (MPT frame) into a frame with a unique frame header (see column 7, lines 1-14. Where the header is broadly defined as only the flag, the sequence bits, and type bits). In addition, Birdwell teaches having means for selectively appending a terminal ID header (SCID) to each said SAR frame for transmission in a

burst from a modem (see column 7, lines 7-10. Where selectively appending a terminal ID header can be broadly defined as appending a selected terminal ID header to the frame). Here Birdwell discloses that the steps of inserting the packet into a frame and appending to the frame a terminal ID are combined. Thus, it would have been obvious to one of the ordinary skill in the art at the time of the invention to perform Birdwell's single step in inserting packets into a frame and appending to the frame a terminal ID as two separate steps. Akyildiz in view of Birdwell do not expressly disclose having means for combining SAR segments representing a single packet to form a SAR frame sine Akyildiz in view of Birdwell disclose including a single SAR segment representing packet in a frame with a unique header. Perdikaris discloses, in a TDMA system with SAR segments, means for combining SAR segments representing a single packet to form a SAR frame (fig.2, column 4, lines 14-26 and column 4, lines 56-68. Where a long message may require several slots while a shorter message may require only one slot, this is taken to mean combining SAR segments representing a single packet to form a SAR frame. Perdikaris does this because the frame structure is representative on an IEEE 802.6 protocol, which uses the ATM slot format (column 4, lines 12-14. where it would be obvious to use ATM since Akyildiz a satellite ATM network). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include means for combining SAR segments representing a single packet to form a SAR frame since such a frame structure is well know in the art as an IEEE 802.6 protocol frame format, which uses the ATM slot format.

Regarding claim 2. Akyildiz in view of Birdwell in further view of Perdikaris discloses that each terminal further comprises: (g) means for detecting said SAR frame and for dividing said SAR frame into SAR segments (Perdikaris, column 4, lines 55-68); (h) means for rearranging the segments in said SAR segments on the basis of said SAR header (Birdwell, fig.6, column 2, lines 52-column 3, line3, column 8, lines 5-46)(Perdikaris, column 4, lines 55-68); and (i) means for reassembling said packets on the basis of said rearranged segments (Birdwell, fig.6, column 2, lines 52-column 3, line 3)(Perdikaris, column 4, lines 55-68).

Regarding claim 3, Akyildiz in view of Birdwell in further view of Perdikaris discloses means for receiving a SAR frame on the basis of said terminal ID information (Birdwell, fig.6, column 2, line 52-column 3, line 3 and column 8, lines 5-46).

Regarding claim 5, Akyildiz in view of Birdwell in further view of Perdikaris discloses that the SAR segment comprises at least a signal identifying the packet sequence number of said segment (Akyildiz, fig.11, sequence count)

Regarding claim 6. Akyildiz in view of Birdwell in further view of Perdikaris discloses that the SAR segment comprises at least a signal identifying a SAR ID of such header (Perdikaris, column 4, lines 38-54).

Regarding claim 7. Akyildiz in view of Birdwell in further view of Perdikaris discloses that the SAR segment comprises at least a signal indicating whether a given segment is first or last among said plurality of segments defining a variable size packet (Birdwell, column 5, lines 37-58)(Perdikaris, column 4, lines 48-51).

Regarding claim 8. Akyildiz in view of Birdwell in further view of Perdikaris discloses that the SAR segment comprises at least a signal identifying at least one receiving modem for said packet (Birdwell, column 6, lines 4-10)(Perdikaris, 211, column 5, lines 48-54).

Regarding claim 16. Akyildiz in view of Birdwell in further view of Perdikaris discloses that the SAR segment has a uniform size data content (Akyildiz, page 35, left column, line 29-right column, 40)(Birdwell, Column 2, lines 52-53).

Regarding claim 17. Akyildiz in view of Birdwell in further view of Perdikaris discloses that size is identical to the size of an ATM cell (Akyildiz, page 35, left column, line 29-right column 2, line 40)

7. Claim 4 is rejected under 35 U.S.C 103 (a) as being unpatentable over Akyildiz in view of Birdwell in further view of Perdikaris and further in view of Raychaudhuri et al (US 5,684,791). Hereinafter referred to as Raychaudhuri.

Regarding claim 4. Akyildiz in view of Birdwell in further view of Perdikaris possible does not disclose that the SAR frame comprises information defining the total length of the plurality of SAR segments representing a single packet. Raychaudhuri discloses, in a wireless communication system, having a frame header that include information about the position and sizes of the different subframe in the current frame (column 5, line 63-column 6, line 2. Where it is obvious that this is done in order to allow the receiver to identify and distinguish between different subframes within the frame). As broadly defined, a subframe is a region within a frame comprising related information, such that a plurality of SAR segments representing a single packet within a

frame can be viewed as a subframe. Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include within the SAR frame information defining the total length of said plurality of SAR segments representing a single packet in order to allow the receiver to be able to identify and distinguish between the different segments representing different packets within a frame.

8. Claim 9 is rejected under 35 U.S.C 103 (a) as being unpatentable over Akyildiz in view of Birdwell in further view of Perdikaris and further in view of Chaney et al (US 5,515,106).

Regarding claim 9. Akyildiz in view of Birdwell in further view of Perdikaris discloses that the terminal ID header (SCID) comprises at least of control group, site, and unit information (Birdwell. Column 7, lines 7-10. Where the use of service channel ID is a well-known way to identify a particular stream of information (program) in a satellite system, as evidence by Chaney (column 1, lines 11-36), where a particular stream of information is tied to a particular unit. Thus it would have been obvious that the SCID contains unit information.

9. Claims 10 and 11 are rejected under 35 U.S.C 103 (a) as being unpatentable over Akyildiz in view of Birdwell in further view of Perdikaris and further in view of Cantoni et al (US RE37, 494). Hereinafter referred to as Cantoni.

Regarding claim 10. Akyildiz in view of Birdwell in further view of Perdikaris discloses that the SAR header comprises one byte having identification information about a receiving terminal (Perdikaris, 211 and column 4, lines 48-54). Akyildiz in view of Birdwell in further view of Perdikaris does not disclose that the SAR header

comprises one byte having identification information about a sending terminal. Cantoni discloses, in a system transporting variable length packets in fixed length slots, having a SAR header that contains identification information about a sending terminal (column 2, lines 40-63) in order to select a reassembly unit at the receiver to be used to reassemble the packet (column 2, lines 58-63). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have the SAR header comprises one byte having identification information about a sending terminal in order to select a reassembly unit at the receiver to be used to reassemble the packet. While not expressly stated that the header is one byte, it is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or value of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. *In re Mason*, 87 F.2d 370, USPQ 242 (CCPA 1937); *Marconi Wireless Telegraph Co. V. U.S.*, 320 US 1, 57 USPQ 471 (1943); *In re Schneider*, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); *In re Saether*, 492 F.2d 849, USPQ 36 (CCPA 1974); *In re Antonie*, 559 F.2d 618, 195 USPQ 6(CCPA 1977); *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since it is not critical to have the header length equal to one Byte, it would have been obvious to have the header length equal to any length, including one byte.

Regarding claim 11. Akyildiz in view of Birdwell in further view of Perdikaris and in further view of Cantoni suggests that the SAR segment is for point-to-point burst between sites having only one terminal each. Akyildiz in view of Birdwell in further view

of Perdikaris and in further view of Cantoni discloses having a satellite system which links two or more sites (Akyildiz, fig1, 2, and 3). While these sites could have multiple terminals. It is not necessary for the system to have each site comprises multiple terminals. It is generally considered to within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The Burden of showing the criticality is on applicant. *In re Mason*, 87 F.2d 370, USPQ 242 (CCPA 1937); *Marconi Wireless Telegraph Co. V. U.S.*, 320 US 1, 57 USPQ 471 (1943); *In re Schneider*, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); *In re Saether*, 492 F.2d 849, USPQ 36 (CCPA 1974); *In re Antonie*, 559 F.2d 618, 195 USPQ 6(CCPA 1977); *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since the number of terminals is not critical to the system, it would have been obvious to vary the number of terminals per site to be any number, including one terminal.

10. Claims 12-14 are rejected under 35 U.S.C 103 (a) as being unpatentable over Akyildiz in view of Birdwell in further view of Perdikaris and further in view of Basu et al (US 6,097,733). Hereinafter referred to as Basu.

Regarding claim 12. Akyildiz in view of Birdwell in further view of Perdikaris does not disclose means for detecting the needed bandwidth for transmitting information signals and for allocating segments of a single packet to respective ones of multiple modems. Basu discloses, in a wireless system, means for detecting the needed bandwidth for transmitting information signals and for allocating segments of a single packet to respective ones of multiple modems (bandwidth allocator. Column 2, lines 27-

57). Basu does this in order to provide sufficient bandwidth in a wireless communication system for multimedia communications (column 2, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to have means for detecting the needed bandwidth for transmitting information signals and for allocating segments of a single packet to respective ones of multiple modems in order to provide sufficient bandwidth in a wireless communication system for multimedia communications.

Regarding claim 13. Akyildiz in view of Birdwell in further view of Perdikaris does not disclose a central network controller for assigning bandwidth among plural modems on a per packet basis. Basu discloses, in a wireless system, a central network controller for assigning bandwidth among plural modems on a per packet basis (system manager. Column 2, lines 27-67 and column 3, line56-column 4, line 2). Basu does this in order to provide sufficient bandwidth in a wireless communication system for multimedia communications (column 2, lines 11-14). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have a central network controller for assigning bandwidth among plural modems on a per packet basis in order to provide sufficient bandwidth in a wireless communication system for multimedia communications.

Regarding claim 14. Akyildiz in view of Birdwell in further view of Perdikaris does not disclose a controller distributed among plural modems for assigning bandwidth among plural modes on a per packet basis. Basu discloses a controller distributed among plural modems for assigning bandwidth among plural modes on a per packet

basis (bandwidth allocator in base station controller. Column 2, lines 27-67). Basu does this in order to provide sufficient bandwidth in a wireless communication system for multimedia communications (column 2, lines 11-14). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a controller distributed among plural modems for assigning bandwidth among plural modes on a per packet basis in order to provide sufficient bandwidth in a wireless communication system for a multimedia communications.

11. Claim 15 is rejected under 35 U.S.C 103 (a) as being unpatentable over Akyildiz in view of Birdwell in further view of Perdikaris and further in view of Rumer et al (US 5,883,893).

Regarding claim 14. Akyildiz in view of Birdwell in further view of Perdikaris does not disclose means for filling a SAR segment with fill data when said packet does not have sufficient data to completely fill a segment. However, means for filling a SAR segment is well known in the art as a way to ensure that each segment is of uniform length, as it is evidence by Rumer (column 1, lines 48-67). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have means for filling a SAR segment with fill data when said packet does not have sufficient data to completely fill a segment in order to ensure that each segment is of uniform length.

12. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akyildiz in view of Perdikaris

Regarding claim 23, Akyildiz discloses a segmentation and reassembly cell comprising a segment packet and a header comprising at least a packet sequence

number for uniquely identifying a packet to which said segment relates (Fig 12, MID and page 35, column 2, lines 18-28), a SAR id for uniquely identifying the segment among all segments derived from the packet (Fig 12, SN or sequence number and page 35, column 2, lines 18-28).

Akyildiz possibly does not expressly disclose having a destination id for uniquely identifying the destination for the packet. Perdikaris discloses having a destination id for uniquely identifying the destination for the packet (RID, received station ID)(211 and column 4, lines 48-54). It would have been obvious to one of ordinary skill in the art at the time of the invention to have a destination id for uniquely identifying the destination for the packet.

Regarding claim 24. Akyildiz in view of Perdikaris discloses a first and last segment indicator (Perdikaris, column 4, lines 46-51).

13. Claims 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell in view of Chaney et al (US 5,515,106). Hereinafter referred to as Chaney.

Regarding claim 25. Birdwell discloses a communication method for reassembling segments transmitted by a satellite/wireless network in a time divided manner by discrete bursts that identify the terminals by at least one of unit, site, and control group (column 7, lines 7-10. where the use of a service channel ID is a well known way to identify a particular stream of information in a satellite system, as is evidenced by Chaney (column 1, lines 11-36. Where a particular stream of information is tied to a particular unit)). Birdwell further discloses a communication method for reassembling segments transmitted by a satellite/wireless network comprising: selecting

a modem and receiving a burst at said selected modem on the basis of common addresses in the burst; storing segments within the burst received by the modem to restore the original order of the segments prior to transmission (column 8, lines 13-16 and column 8, lines 40-45); resequencing the sorted segments in a queue at a selected one of a plurality of locations on the basis of a burst slot (sub-SCID) and Key (EOF and SOF flags) (fig 6 and column 8, lines 13-45 where resequencing and storing are done simultaneously and the sub-SCID address determine the burst slot); and combining said segments at each of the plurality of locations to reassemble a packet (fig.6 and column 8, lines 13-45).

Regarding claim 27. Birdwell in view of Chaney discloses that the segments received in burst are processed in the order received in the burst (Birdwell, column 11, lines 12-15).

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mounir Moutaouakil whose telephone number is 571-270-1416. The examiner can normally be reached on Monday-Thursday (4pm-4: 30pm) eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mounir Moutaouakil  
Art Unit: 2616



HASSAN KIZOU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600